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## ORIGINAL DEPARTMENT.

### LECTURE.

#### VII. PULMONARY PHTHISIS.

Delivered at the Philadelphia Hospital, December 31st, 1879,

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REPORTED BY WM. H. MORRISON, M.D.

GENTLEMEN:—I shall not, to-day, bring any cases before you; but having cleared the way by the discussion, last week, of the treatment of the great complications of phthisis, night-sweats, fever, hemorrhage, diarrhoea, and laryngitis, I shall now pass to the treatment of the general condition. In the first place, if it is true in regard to any disease at all, that we are not to treat the disease as a separate entity, but to treat the sick person as an individual, it is more true in phthisis than in any other. In its treatment we are to begin before the phthisis has commenced, since the treatment of phthisis is to prevent its development. This applies not only to cases in which there is a local disease of the lung; but still more does it apply to persons who are evidently getting ready to have phthisis. Where we have an individual showing a weak constitution, who has little power of maintaining his temperature and circulation, who loses flesh upon slight provocation, who, after an acute illness, recovers slowly, such a person is predisposed, upon any attack of lung trouble, to have it pass into a chronic state. Where we see these indications of weakness of constitution in childhood or infancy, we should advise the parents to resort to the proper treatment, in order to develop a

healthier and stronger constitution; for, as we have seen, in those who have an inherited tendency, or an acquired debility, there is a marked susceptibility to have phthisis developed. In such cases an attack of lung trouble, which in a healthy individual would disappear in a short time, is apt to remain and effect such changes in the epithelial lining as will lay the foundation of catarrhal phthisis.

In order to prevent the development of phthisis, to increase the constitutional health and eradicate weakness, there is nothing so important as proper hygiene. If there are any great and radical differences between the practice of to-day and that of fifty years ago, it is in the more accurate diagnosis and the broader views of hygiene, as bearing upon treatment, that have been introduced. Nowhere do we see this more marked than in this group of diseases.

Sunlight, pure air, proper gymnastic exercises, regular out-door exercise, maintaining the tone of the skin by bathing and friction, and if necessary, a change of residence to a more suitable climate, are the elements that are able to convert a feeble system into a vigorous one, and which, when there is a commencing predisposition to phthisis, are able to overcome and eradicate it. The same thing is true after the patient is taken with catarrhal or croupous pneumonia.

Now, as long as it was the habit to think of phthisis as always tubercular and always associated with this special new growth in the lung, the treatment was practically regarded as hopeless, and it was thought that all that could be done was to render the patient as comfortable as possible and treat the special symptoms as they appeared; but now, since we know that phthisis, in

the majority of cases, at least in the beginning, is not tubercular, and that it may run through its whole course without the development of tubercle, its treatment becomes of extreme importance. If a person with a feeble constitution gets an attack of catarrhal pneumonia, we must regard him as liable to pass into a state of phthisis; and this is true, not only of severe attacks, in which, perhaps, the whole of one lung or large portions of both are involved, but also of those involving small and circumscribed portions of the lung tissue, which so frequently occur and are regarded as common colds.

Catarrhal pneumonia of this latter type will be one of the most frequent diseases with which you will meet, and it must be treated vigorously. The patient should be absolutely confined to bed. Rest should be insisted upon until the physical signs of the local disease are removed, or until the disease, despite our efforts, has passed into a chronic state. Local counter-irritation and depletion should be employed, by dry cupping, or if the fever be high, and the patient pretty strong, wet cupping, and by blisters, or counter-irritant applications. I do not want, to-day, to enter upon the treatment of catarrhal pneumonia, but desire to dwell upon the importance of rooting out this disease at its very beginning, the importance of regarding it, as it really is, of an inflammatory character, and the danger of the exudation passing into a state of cheesy degeneration. If you treat this disease actively, you will be able, in many cases, to prevent it from passing into phthisis.

Suppose, despite your effort, the disease passes into the chronic form, or that the patient does not come to you until it has reached this stage; for in five out of six cases you will find a history something like this—the patient has had a severe cold, which settled on his lungs, he has been gradually losing strength and flesh, has, perhaps, a little fever, and on examination you will find evidences of local catarrhal disease. Here there has been these limited catarrhal attacks, which have attracted little attention, and have slowly passed into cheesy degeneration, with perhaps disintegration of the lung tissue. Here, again, we find the immense importance of a proper hygiene. I think our power of successfully treating these cases depends upon our power of getting the patient to understand that we cannot cure this condition by drugs. The truth is that the general health is so impaired, and the tone of the system is so reduced, that instead of the inflamed epithelial cells being able to throw off the catarrhal pro-

duct and return to a healthy grade of action, they tend, more and more, to pass into this unhealthy state, the matters undergo cheesy degeneration, the lung tissue becomes involved, and phthisis is developed.

Secondly: in consequence of this extreme weakness of system, there is a great susceptibility to changes of temperature, damp, and other depressing agents, so that he is constantly getting, from the most trifling causes, fresh attacks of congestion and catarrhal inflammation, which extend the original trouble. This weakness of system is what you have to meet by your treatment. In the great majority of cases, when they first come under notice the local trouble is so slight that if the system was in a healthy state it would be thrown off in a few weeks. As soon as you have gotten the patient to grasp this view of the subject, and to make it his business to endeavor to build up his general health, you have accomplished a great deal in the treatment.

In speaking of the hygienic treatment of phthisis, I shall allude to only one or two points. All the conditions that predispose to phthisis serve to maintain it. The study of the skin and its circulation is most important, for a loss of tone of the skin constantly predisposes the patient to take cold, the cutaneous circulation is checked, congestion of internal organs takes place, and extension of the local trouble results. I would say, then, that our care should first be directed to improving the tone of the skin, and the surface circulation. For this purpose you will find a cold sponge bath, or a plunge bath taken every day, at suitable times of the year, a very important measure, and one which I think is too often neglected. The best way to take this bath, is not to take it in the slow desultory manner of an ordinary bath for cleanliness, but to take one quick plunge, in and out in a second, and then to dry the surface rapidly by vigorous friction. Where the patient is too weak to do this, sponging with cold salt water may be substituted. The time of day when these baths should be taken is important. They are usually taken in the morning before breakfast, but this is wrong. They should be taken some time after breakfast. Suppose the patient has breakfast at 7.30 A.M., or 8.30 A.M., then 11 A.M. is the best time for the bath, as at that time the power of reaction is at its best. In many cases, where the patient has his business to attend to, this time is not suitable. In such cases the bath should always be taken in the morning. There is a great amount of good to be gained by this mode of treatment, if properly carried out.

In cases where there is an almost invincible tendency to take cold, with feeble circulation, cold extremities, a skin that is delicate, dry, and exceedingly sensitive to changes of temperature and humidity, I have found inunction of oil into the skin, over the whole surface of the body, after the bath, of the greatest possible value. In many instances it will render the patient proof against these changes.

Diet and exercise require fully as much attention as does bathing. Let me here refer to the importance of abundance of fresh air. Note that these attacks of congestion depend more upon feebleness of the circulation than upon anything else, and that anything that renders the circulation less vigorous will make the attacks more frequent. If the endeavor is made to protect the patient from exposure by keeping him shut up in a warm room, the susceptibility will only be increased, so that no matter how warmly clad the patient is he will not be able to resist the slightest exposure. The only way to protect the patient is to increase his strength, and thus enable him to resist these changes. If the patient is too weak to carry out the proper measures to increase his strength in the climate in which he is living, he must change it for a more suitable one. Exercise in the open air is absolutely necessary. It should be taken every day, about the middle of the day, except when the weather is stormy, blustery, or so intensely cold that the patient would be chilled at once, for cold of itself is not so injurious.

Closely allied to the question of exercise is that of change of climate. The greatest fallacies exist as to the reasons for, and the objects gained by, a change of climate. The climate of one place is essentially the same as that of another, leaving out, of course, all consideration of malaria, filth, etc. What you induce a patient to change his climate for, is to place him under better conditions to practice the same hygiene and therapeutics as he would at home. The change of climate is not going to do anything, directly, for that man's trouble. If he should go to a suitable climate and think that then he had done all, leave off all his hygienic measures, fall into irregular habits as to eating, sleeping, etc., it would have been far better for him to have remained at home.

Change of climate is exceedingly important under two conditions. In the first place, when the climate in which the patient lives is one where there are long periods of inclement weather, as, we will say, in this city during the next ninety days, to the first of April, where it is

doubtful if much out-door exercise can be had. A climate like this is not suitable for such patients. Again, if the patient is so weak that he is unable to bear much cold, even if it be dry cold, he must be sent to a milder climate. Change of climate is, then, not to be regarded as possessing any curative effect in itself, but simply as an assistance in carrying out the proper hygienic and remedial measures, and to be resorted to when the patient does not respond to these measures in the climate in which he is. Diet, dress, out-door exercise, gymnastics, mostly in-doors, and proper bathing, are then essential elements of our treatment, and lie at the bottom of all successful treatment.

Now, after all these are attended to there comes up the question of therapeutical remedies. There are two principles that would occur to all in the thinking what we would do in a case of phthisis; one is, that we should aim at improving the general strength, the other, to aim at removing the local disease. The patients are always reduced in health, and this would at once suggest the use of nutrients and tonics. The best nutrients are food and fresh air; besides these we have a number of other valuable remedies, as iron, malt, alcohol, glycerine and cod-liver oil. They all are analeptics. They supply material from which the system can build up its tissues, and when the patient is able to digest these articles, in addition to his ordinary diet, they may be given with great advantage. They do not exert any specific action upon the local disease. They produce their effects upon the general nutrition, and thus tend to restore a more vigorous grade of action to the affected cells, so that they will produce more perfect cells. On the whole, there is perhaps no remedies of this class so generally applicable as the oils, and of these, the best is cod-liver oil. It is to most persons very digestible, and can usually be given by some device that will conceal its taste. If the patient falls off in the quantity of food that he takes when taking oil, he had better give up its use. It is only of advantage when it does not interfere with digestion, when the patient is able to take his full quantity of food, and when the oil is easily digested. The same is true of all other remedies of this class. They furnish the same elements of nutrition, in a concentrated form, that we have in milk, beefsteak etc.

In many cases, where the digestion will tolerate it, iron is of extreme value, and perhaps in such cases our choice of the preparation to be used will depend somewhat upon the condition of the local disease. We may give it in a

simple form, if we desire only to introduce iron into the system, or in the form of the iodide of iron, where we feel that iodine would be of service for the local condition.

The same general principles would govern us in the use of tonics. They do not exercise any direct power over the local disease; but it is only by enabling the system to receive and appropriate nourishment that they do good. When the appetite and digestion are good, tonics are not needed; but when there is functional disturbance of digestion, the vegetable tonics and mineral acids are to be used upon the same principles that would govern their use, in the same condition of depraved nutrition, under other circumstances.

In estimating the progress of the case, and in governing the treatment, you have two elements to guide you: first, the quantity and the character of food assimilated; secondly, the character of the discharges and the movements of the body weight, as determined by frequent observations. Without paying attention to these points, I think little can be told as to the condition of the patient and the success of remedies.

Now, as to the treatment of the local disease. This is undoubtedly last, because it is of the least importance; yet it is very important; and I think great good can be done by addressing ourselves to its treatment. Counter-irritation is, I think, of great value throughout the whole course of the disease until tuberculosis is developed. As long as the disease is a simple inflammation, even after destructive disease has shown itself and a cavity has formed, I think that mild counter-irritation is of service.

Secondly, the alterative effect of inhalations is of unquestionable advantage. A great variety of inhalers and a great variety of remedies to be inhaled might be recommended, but your own judgment will guide you in the selection of the former, and your preference and the result of your experience in the choice of the latter.

Then, we use certain drugs internally, in the hope that they will modify the condition of disease at the affected part. Among these are to be mentioned mercury, iodine, and arsenic, as the most potent. There is great difference of opinion as to the use of these powerful alteratives in phthisis, and in discussing this subject we are treading on delicate ground. There is no doubt that if we had to control only the acute disease, where destructive lesions had not shown themselves, we would resort to these drugs, if we did not dread their interfering with digestion and destroying the strength and vital-

ity; and just as we find the strength and vitality well preserved, do we feel justified in using these remedies. Take, for instance, a case of croupous pneumonia, passing into chronic solidification of the lung, and where you fear that it will pass into caseous degeneration and phthisis; here, I think, you will find mercury, associated with alkaline expectorants, very useful. It may be given in the following combination:—

R. Hydrarg. bichloridi, gr.  $\frac{1}{4}$ – $\frac{1}{8}$   
Ammonii chloridi, gr. v–x.

This may be given dissolved in syrup of aca-cia, or some other vehicle. Instead of the muriate of ammonia you may substitute the iodide of potassium in doses of from two to four grains. In cases, then, that have a marked inflammatory beginning, particularly if attended with a considerable amount of solidification, which becomes more or less permanent, and where you fear that the exudation will pass into cheesy degeneration and terminate in phthisis, you will find counter-irritation and the use of mercury and iodide of potassium of extreme value, associated, of course, with the most minute attention to hygiene; for we must not forget, while we are trying to remove this local effect by drugs, that the ultimate result will depend upon the maintenance of strength and constitutional vitality.

You will more rarely be led to employ mercury in catarrhal pneumonia threatening to pass into phthisis, than in croupous pneumonia; still, there are a number of cases of a catarrhal character where the local signs will remain obstinate, and there is a limited patch of solidification, where the general strength is not much impaired and other remedies have failed, in which minute doses of mercury may be used with great advantage. In such cases I usually employ the protiodide of mercury in minute doses, one-eighth to one-sixth of a grain, associated with a vegetable tonic, as the extract of gentian, or nux vomica. I do not think that minute doses of mercury given in this way exert any very depraving effect upon the constitution and nutrition, while I am satisfied that they greatly favor the absorption of inflammatory products, whether croupous or catarrhal, which will not yield to simply alkaline and resinous expectorants. But I say you are treading upon delicate ground in the use of these powerful remedies, and I do not mention them except with the most strenuous caution, that they should only be used under the most watchful supervision, and in carefully selected cases.

We have as other remedies favoring the removal of these products, the alkaline expector-



ants. Of these, the muriate of ammonia is at once the most accessible, the most used, and as good as any other. It may be given in pretty large doses without interfering with the digestion. It enters into the composition of a great many cough mixtures; and just here let me say, in regard to cough mixtures in phthisis, that I think, as a rule, they are better omitted. I do not know what good is to be done by giving the patient large quantities of syrup of tolu, of squills, or of senega. If the patient has a bronchitis with his phthisis, and if there is a large quantity of ropy mucus, keeping him constantly coughing, and disturbing his sleep at night, you may, for a time, employ these stimulating and somewhat nauseant expectorants; but such remedies as these do not possess any decided alterative effect upon the diseased lung tissue, while we know that they lessen appetite and interfere with digestion, and they should be therefore used only for the temporary purpose of relieving the bronchitis. If we are to get any benefit from remedies in phthisis, I think that they must be given in a simple form and in pretty solid doses.

We come now to a question closely connected with this, that is, the use of opium in connection with expectorants and alteratives. I think that opium should be avoided as long as possible in phthisis. Undoubtedly, the continued use of opium, even in small doses, is injurious to digestion and nutrition; but there are certain conditions that call for its use. These are, a tendency to diarrhoea, intense irritability of the air passages, constant irritative cough, extreme nervous irritability and wakefulness. These, particularly if connected with marked febrile action, are much benefited by minute doses of opium. Opium is to be used, not as a remedy for phthisis, but to meet certain definite indications, and its use is to be discontinued as soon as the indication has been removed.

Returning to the alterative expectorants, there is a very good preparation in the market, known as the compound syrup of the hypophosphites. I refer to the preparation without iron. This is a combination of the hypophosphites of soda, magnesia and lime, with free hypo-phosphoric acid. It is a tonic, stimulating the digestion, and at the same time, I think, exerting a favorable action on the epithelial cells, softening the secretions and rendering expectoration easier. This preparation will often be well borne by the stomach when all others do not agree.

The other alterative expectorants are drawn from the class of resinous substances. The most useful of them being tar, carbolic acid and yerba-

santa. Purified tar, taken either in emulsion or in capsules for a long time, in cases of chronic catarrhal phthisis, is often well received by the stomach, stimulates digestion, and I think exercises some alterative action over the local disease. It is evidently absorbed, for its odor can be recognized in the various secretions, and if its use is continued for a long time, it may, in its excretion from the lungs, modify the local disease. This is also true of carbolic acid, but its effect is not as good as that of tar.

The best of this class is, perhaps, yerba santa. This is a remedy lately introduced. It is the *eriodyction glutinosum*, a native of and indigenous to California, and furnishes a resinous extract. It may be prescribed in the form of the fluid extract, and it possesses in a higher degree the power of turpentine and copaiba. It is non-irritating to the stomach, stimulates the appetite, may be given in full doses without causing disgust, and probably exerts a mild local alterative action. When you think it not advisable to employ mercury and iodide of potassium, you may use a combination something like this:—

R. Ammonii, chloridi,  $\overline{\text{ss}}$  ij  
Ext. eriodyctionis, fld., f.  $\overline{\text{ss}}$  j  
Syrupi pruni virg., q. s. ut ft. f.  $\overline{\text{ss}}$  ij. M.

Sig.—A teaspoonful every three or four hours.

If necessary one grain of muriate of morphia may be added to this combination.

The old expectorants, as squill, senega, etc., I would relegate to a back group, to be used only for occasional attacks of bronchitis.

I have now alluded to the most important remedies for the treatment of phthisis; and perhaps I have said enough upon this subject, for, after all, in a course of lectures like this, it is only possible to present the thoughts that fill one's mind, and you will have to work out the details of treatment for yourself. There is no invariable and fixed line of treatment, but each case must be treated according to its own indications.

I will allude to only one thing more, in conclusion. Sometimes, after you have pursued this treatment as long as possible, you find that the general health remains pretty fair, the local disease remains about the same, does not tend to spread through the lung, a cavity has perhaps formed, purulent expectoration is still kept up, and the patient's strength is slowly being worn out, but yet your remedies do not seem to arrest the disease. Under such circumstances, local treatment is very desirable, and after inhalations had been tried and abandoned, I should resort to another form of local treatment, by the intro-

duction of a hypodermic needle through the chest walls, and the injection of stimulating substances into the diseased spot. This plan of treatment I consider only applicable in rare cases. The group of cases in which inter-pulmonary injections are to be used is very circumscribed and well defined.

It includes only those persons who have a local circumscribed spot of disease which does not disappear, and particularly if a cavity has formed, whose general health is still fair but is slowly breaking down, and where hygienic and therapeutic means have been tried without success. These are the cases in which inter-pulmonary injections may be used with benefit and without risk to the patient.

This whole subject is one of great fascination, and of intense interest to me, and you will all probably see more of this disease than of all others put together. You will everywhere meet with the questions we have considered, confronting you, and I have no doubt that the more you study these cases the more you will find that you can do for them. I am sure that by taking hold of these cases vigorously, bearing in mind the great importance of hygiene, and combining sound hygiene and rational therapeutics, you will be able to effect a complete cure in many cases, and even in the worst cases do much to improve the comfort and lengthen the life of your patients; and your treatment will be so satisfactory to yourself and your patients, that it will amply repay you for all the time you have spent upon this subject.

## COMMUNICATIONS.

### REMINISCENCES OF A VISIT TO EUROPE IN 1879 (CONTINUED).

BY LAURENCE TURNBULL, M.D.,  
Of Philadelphia.

MUNICH, September 20th, 1879.

Resuming my diary, I first find note of a most delightful visit to the hospitable country mansion of my friend, Dr. Weber Liel, who resides on the Rhine, at Mallander, above Coblenz. The doctor and his charming lady, who, by the way, is an American, did everything they could to make my visit an agreeable one. While enjoying Dr. Weber Liel's hospitality I had frequent opportunities of discussing many interesting points in regard to the physiology and therapeutics of the ear. I had already made use of some of his ideas in my work on "Tinnitus Aurium," 2d edition, advising in certain forms tenotomy of the tensor

tympani. He was the first who clearly pointed out the great importance of the palato-tubal muscle, and that patients who suffer from progressive deafness have antagonistic contraction of this muscle. A recent case of deafness after an operation for cleft palate was reported by my son, and it was only overcome by prolonged and persistent treatment. In Dr. W. Liel's valuable work, "Progressive Schwerhörigkeit," Progressive Deafness, he gives a most accurate account of the complicated anatomical and physiological relations of the Eustachian tube and its muscles. These facts have been confirmed by others. Credit is due to Dr. Woakes, who directed the English reading physician more particularly by dwelling clinically on paretic deafness, in his work published in January, 1879. Then in a paper read by the same authority before the Otological Section of the British Medical Association, and which was discussed by Dr. Liel and others. Still more recently, in the second edition of his work, in which he gives full credit to Dr. Weber Liel, as follows: "I find myself quite in accord with the statements advanced by Dr. Weber Liel. The cases observed by me and discussed in the paper referred to, present some striking points of divergence from the disease described by this author as 'progressive deafness,' and which divergence will be apparent by the tabular comparison of symptoms given below, of the two classes of cases."

#### SYMPTOMS IN PROGRESSIVE DEAFNESS (WEBER-LIEL).

1. Paresis of palate muscles connected with middle ear.
2. Characteristic signs in palate.
3. Antagonistic contraction of tensor tympani, inducing
4. Depression of membrana tympani, with indications of permanent retraction of tendon of tensor tympani, coming on slowly.
5. Deafness, slight at first, gradually increasing, with intervals of abatement.
6. Noises, constant.
7. Giddiness, recurring at intervals, a constant symptom.
8. Progress, slowly, to complete deafness, but curable in early stages.

#### SYMPTOMS IN PARETIC DEAFNESS (WOAKES).

1. Paresis of tensor palati and levator palati.
2. Characteristic signs in palate.
3. Paresis of tensor tympani (probably also of stapædii).
4. Membrana tympani to remain nearly normal in appearance, but deprived of its "accommodating" power.

5. Deafness well-marked from first.
6. Noises, exceptional.
7. Giddiness, absent throughout.
8. Progress quickly to recovery.

September 21st, started from Mallander House, the home of the Liels for several generations; thence to Coblenz, and took a run to Bonn, to look at the statue of Beethoven, situated in the market place, and also visited with much interest the house in which that most distinguished musician was born. Took the cars along the banks of the Rhine to Mayence, and from thence to Munich, arriving at eight A.M., after traveling all all night. The cars were very comfortable, so that I was able to sleep until five A.M., when the light and constant changing and noises kept me awake. There is much to be seen in Munich; besides the permanent galleries of pictures and statuary, there was an international artists' association' exhibition of pictures, engravings and statuary. I repeatedly visited this fine collection, which numbered 2392 pictures. There was also the finest collection of wood engravings and illustrated works. The collection was in the Crystal Palace, and at the conclusion the works were distributed by raffle, and the tickets were sold at a moderate cost. On the following day, and for a week, visited the wonderful, and in many instances, splendid collections of artistic buildings, with their numerous frescoes, etc., and on Sunday the Haedhauser Kirche and the Basilica of St. Boniface, the latter one of the most perfect of the many creations of king Louis, of Bavaria, who was a great patron and lover of art. After spending the early Sunday morning, called a passing cab (*Droschke*) a one-horse vehicle, and was driven to the English church, some eight squares, for 50 pf., equivalent to six cents, or half a mark. The church service was held in a building called the "Odeon." On the ground floor, on the opposite street, there was a concert; most of the populace were out of doors, the public buildings were open, and at six o'clock one of the operas of Wagner was to be performed.

In the afternoon, in company with a friend, I took a walk along the banks of the river "Isar," from which I could see the Alps, and then to the English Garden, formerly a marshy woodland, now a beautiful park, five miles in length and about two miles broad. The first attempt at redeeming this place from primitive wildness was made by the celebrated philosopher, Count Ramford, an Englishman, who presented it afterward to his favorite elector, Charles Theodore, in 1789, and the improvements were followed up and completed under Maximilian Joseph I.

Several branches of the rapid rolling "Isar" have been carried through the garden, and are crossed by pretty rustic bridges; also a number of pretty lakes with Chinese towers and cafés invite the tired and weary to refresh themselves. On the following evening I went to hear Gungl's celebrated band, and looked upon the lower classes enjoying the music, but, at the same time, always either eating or drinking. Gungl is as bright as ever, and wields his baton with as much success as he did on his visit to our Centennial. Munich is a most interesting emporium of art, and much time can be well occupied in looking at the wonderful productions of ancient and modern works of art. The frescoes interested me very much, being as fine as many of our best paintings on canvas.

It is very difficult, in such a city as Munich, to withdraw from the fine arts; but one of my objects in visiting this interesting city was to see Professor Rüdinger, the famous anatomist, and look upon his perfect dissections of the human body in the School of Medicine; and especially interesting was it for me, as his collection contained the valuable sections of the head in which are shown the true position and characteristics of the human tympanum and Eustachian tubes. I compared them with the photographs of these sections which I have in my possession, and was happy to find that my pictures gave me a better idea than the sections, because the latter were beginning to change by the action of the diluted alcohol and the light. There are numerous most perfect preparations in this collection which are well worthy an especial visit and careful study by physicians from the United States.

After a week's sojourn at Munich, to which I afterward returned with pleasure, on my way back from Vienna, desiring to again see its wonderful collections of ancient products, obtained from every portion of the world, and arranged chronologically with so much care, for study and research, I left for Vienna.

The journey to Vienna was a long and fatiguing one—276 English miles from Munich—and yet it was interesting. The fine weather and a perfect sunset combined, so that I could count from fifteen to twenty peaks of the Austrian Tyrol. As we left Bavaria, which we did at Salzberg, the soil became better, and produced fine green fields of clover, etc., even late in the season.

They use a very ancient plough, drawn by oxen, and the women, as brown as berries, were doing most of the out-door labor, dig-

ging potatoes, etc. The stations were often very pretty, and as our progress up the mountains was slow we very frequently would stop near front porches which were covered with flowers, creepers, etc., and on which were stands covered with grapes in tempting clusters, pears, apples and peaches, with wine, beer, coffee, and substantial articles, for those who desired them.

I arrived at Vienna late at night, and after paying my fare to cross the bridge into the city, the cabman drove me to the Grand Hotel, which resembles an American hotel in its conveniences, having some three hundred rooms, and an elevator to all the floors, with bath, telegraph, and a most admirable restaurant in the centre of the court, covered with glass; all under the careful management of a most competent gentleman, Mr. F. Sommer. After a comfortable warm bath and good bed awoke refreshed, and obtained a good breakfast à la carte. The porter, a most important and generally very intelligent and polite individual, gave me all the information desired in regard to Professors Gruber and Politzer, and the University of Vienna. He then obtained a carriage for me, and the first visit I made was to the celebrated aurist, Professor Joseph Gruber, whose office and residence was at "Neuer Markt," No. 2, a four-story building in flats, with numerous persons occupying each floor. On ringing the bell the portress came to the door, a middle aged woman, and informed me the Professor was to be found on the third story. I went up and rang a bell, and was ushered into a small vestibule with a cloak rack, and a quiet German man took my card to Professor Gruber, up stairs, and soon returned and ushered me into his reception room, which was well filled with patients of the better class, waiting for the Doctor. The room was furnished with taste, with numerous pictures, cabinets, etc., and comfortable chairs and sofas, with windows looking on the street.

The Doctor soon arrived. His step is brisk; expression pleasant; short, thick hair, well sprinkled with gray; very bright, dark eyes, and rather a low forehead. On entering the waiting-room he called out my name. I arose, and he grasped my hand with great warmth; he was evidently pleased to meet me, and ushered me into his private consultation room, and again took both my hands in his and told me, in very good English, how glad he was to see me, and then inquired after his pupil, my son. He also informed me that he had heard of me in Cork, at the meeting of the Section of Otology, of the British Medical Association. I then made an engagement with

him for the following day, to come to his house and visit with him the celebrated Hospital, and was driven to the various points of interest, visiting the public buildings, churches, etc. Also took the tramway, after dinner, as they call the passenger railroad, and visited Prince Rudolph's bridge, over the Danube. I could not help noticing, as I went along, the remarkable brown hue, almost negro like appearance, of the working people who were employed in the streets—both men and women—and the extensive use of dogs as beasts of burden. Boys and men harness themselves in company with huge, strong dogs, and by means of long, flat wagons, convey very large and heavy loads of goods to the various portions of the city. Some of the dogs are very large and are made pets of, and often destroy the smaller ones, especially the black dogs, the owners of which have to pay for them. Even the celebrated Prince Bismarck, when he came to this city on a visit, brought with him his famous dog "Sultan."

An unpleasant peculiarity of this city is the dust of the streets, which enters your nose and mouth, and passing into the bronchi causes irritation and inflammation of the mucous membrane, and in conjunction with the cold, damp air, has a strong tendency to induce phthisis. The material which they use on their streets is lava, which is like emery, fine and very sharp, no matter how small it is pulverized, and causes a running from the nostrils, with sneezing, from which I suffered, as almost all are apt to do.

One of the most magnificent buildings in Vienna is their Opera House; equal, I think, to the beautiful one at Paris. I had an opportunity of seeing the opera of "The Queen of Sheba," by Goldmark. It was superbly rendered, with two prima donnas and a splendid orchestra, with a full chorus of well-trained voices.

[To be continued.]

## HOSPITAL REPORTS.

### COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

A CLINIC, BY FESSENDEN N. OTIS, M.D.,  
Clinical Professor of Venereal Diseases.

#### The Diagnosis of Syphilis.

We have one or two cases, gentlemen, that I saw in passing on my way into the lecture room, that seem to make it worth while to consider the value of time as an element of diagnosis in venereal diseases. You know there is a characteristic difference in time between the appearance of the two diseases, chancre and chancreoid. Chancreoid commences to show a destructive action at once



on contact, so that we expect to find positive, well marked evidences of chancreoid long before we would have evidence of syphilitic disease. This destructive action commences at the moment of contact. It begins by setting up a necrosis, which first shows itself in a congestion of the parts, then as a perceptible destruction of the part, visible under the microscope before it is perceptible to the naked eye, commencing as a minute point, and then extending by a rapid process of molecular degeneration. The highest type of ulcerative action is this chancreoid. We are accustomed to talk about the chancreoid having an incubation of three to six, seven, or eight days. This is a very loose way of talking. There is no such thing as an incubation, either in the chancreoid or in the chancre, as we shall see as we pass. But in chancreoid particularly, there is no reason for calling it an incubation, when it is only because it is so small that your attention is not called to it at first. The sore is there at the commencement; it is very small when it attracts your attention; it may not be until four, six, or ten days. But when a sore appears as an ulcerative lesion within ten days, where we generally find these sores, on the penis, then we say this is a chancreoid. We say it is a chancreoid, because of the time which has elapsed from the time of contact up to its characteristic development. So, time is a valuable element in making up our minds. Now, if, before we find anything that is characteristic, twenty days, fifteen days, fourteen days, anything over ten days, have passed, we say that is very suspicious; that may be something else. What else? Why, true chancre; syphilitic trouble; the initial lesion of syphilis. And that is a lesion which becomes in a sense ulcerative, as I have explained to you, but has an entirely different nature, ulceration connected with it being one of two varieties, either accidental, as the result of superimposed trouble upon the original condition, which obscures it, and not connected with it except in that sort of way, or caused by a disturbance of the circulation in the part, from the accumulation of material which has been growing at that point. I cannot tell you too often of this difference, which so many have been in error about heretofore; that the one is a process of ulceration, of necrosis *per se*, and the other is a process of proliferation, which results in a lesion from the fact that there is so great proliferation that the tissues are filled up with the cell material, and the vessels of nutrition are choked, and a molecular necrosis is the result. This comes on later. We do not look for the accumulation of cells as a characteristic of the initial lesion of syphilis before the twenty-first day, and then we find it not necessarily as an ulceration, except the ulcerative lesion is not the initial lesion of syphilis, but we find it as a little nodule, a little papule, without any breach of tissue whatever. This is just as important, and may never be anything else. It may pass away without ever having come to an ulcerative point at all. That is the way it begins.

Now, in some cases this very soon breaks down, from a cause that I will tell you of, and there appears an ulcer there. We look at it, and say, well, what is that? Well, when it does appear, if it come, three, six, eight, ten days

after connection, then we say it is chancreoid. Whatever else there may be about it, it is chancreoid, probably. But after twenty or thirty days have elapsed and you find such a lesion, then you hesitate; you stop to inquire into it; you make the matter of time an important point in your diagnosis.

When did this trouble first come to your notice? "About three days after connection." Had you any connections previous to that? "Yes sir, about two months previous."

Now here, you see, is a point of importance, gentlemen; and it is things of this kind that are so necessary to be borne in mind when you come to make a diagnosis and prescribe treatment. A man comes to you and says, "here is a sore which I got from a woman three days ago." Now, perhaps he did and perhaps he did not. There is one thing very certain about it, *he thinks* he did. Now he has had connection two months before, perhaps (not referring to the reply of this patient); but two months before he had connection with a woman whom he had full confidence in; he does not think it possible that he could have contracted the disease from her; yet he may have acquired a syphilis from her, that has gone on in this clean little papular sort of way, not attracting his attention until he had connection with another woman whom he suspected might give him disease, and then he begins to watch, and two or three days afterward he sees this little sore.

It is not well that we accept the simple statement of the patient, that this sore is the result of contact three days before. We must look back, and see whether there may not be something behind that, and that this recent connection has simply called his attention to a trouble the result of a former connection; that it is really a lesion of syphilis and not a more innocent trouble. We may thus be saved many mistakes which have excused patients in doing things which they would not have done had they known the real nature of their disease.

Now let us see what you have here. You had no connection at all in the interval between your last connection and the one two months previous? "No Sir." This matter of diagnosis, gentlemen, is one well worth our spending some time upon. Very much mischief has been done by mistaking the initial lesion of syphilis for sores of other varieties, as chancreoid, or a simple lesion. It is a very grave matter to overlook syphilis, and give your patient to suppose he has nothing but a simple lesion, and when the simple lesion heals he thinks that is the end of it, and then subsequently his trouble proves to be something else, and perhaps he does not find that out until he has infected somebody else.

Now, here we have some little points of ulceration—sharply cut little points; here is a sharply cut loss of tissue over a distinct depression; and here there is another of the same kind which is covered up by a little unhealthy granulation. Now, those of you who wish to come nearer will see there a little chancreoid; it is very small; it would not attract attention, perhaps, but for the fact that the chancreoid is tender; it has an inflamed border, and one of

its characteristics is its sensitiveness. Now, that is characteristic of about the third or fourth day from its first appearance as a little pimple. This little sore here he had not noticed, because it was in a fold of the mucous membrane, and is very small, about the size of half a pearl of barley; and he is getting some more little pimples. Now, here we have this form of ulcerative sore sharply cut, with an inflamed border, and it is very tender; that is one characteristic of it; and then there is another characteristic of it which is present here, that there are several little pimples; it is a multiple lesion, which is characteristic of this form of trouble, because the secretion of it is probably setting up the same destructive action that is characteristic of the original sore. Now, the secretion in the initial lesion of syphilis has no such property in itself. The secretion of the initial lesion of syphilis is a bland, transparent fluid, introduced upon the surface of the skin, the mucous membrane. Under the surface of the mucous membrane of the patient it does not set up any irritation whatever. The tissues heal as if nothing of the kind were present. But if you introduce the secretion from this sore under the skin, or lay it upon the mucous membrane so that it shall lay in close contact between the folds for a length of time, by its own property of erosion it will make its way into the tissue, and set up a lesion exactly like that from which it was derived; so that the characteristics of this sore are, in the first place, the action beginning immediately after contact; then its going on as an active destructive process, its having an inflamed border, and its being sensitive to the touch; its having a secretion which is purulent (whereas the one we have just been talking about is serous); and this purulent secretion has the property of contagion, of communicating a similar action to the tissues with which it is brought in contact, and establishing a general sore; and to that property we are indebted for its multiple character, so that when you see half a dozen sores on the penis you say at once, there is chancreoidal action. The accumulation of cells which brings about the initial lesion of syphilis does not occur in that way. We have but a single one, as a rule. Sometimes there are more. Where the inoculation takes place at different points we may have several initial lesions of syphilis, but this is rare. Inoculation usually takes place at a single point, and the cells heap up at this point, and finally make themselves manifest by a papule, which may or may not go on to an erosion or apparent ulcerative action.

This young man, then, says that this came on three or four days after connection. You can understand now why it has done so. All that was required was time enough for the infecting material to make its way into the tissue. Now, this length of time varies in different cases. If it happens to be upon the skin of the penis where it is whole it may stay there for some time: and if the man is cleanly in his habits it may be washed off and there may be no evidence of it at all, he may not suffer from any trouble whatever; but if it gets in a fold, as you see it here, when the prepuce is drawn back, where the

skin naturally falls in folds, it may after a time get up an ulcerative action. It is slow in such a case as that, and you may be deceived. It may be ten or fifteen days, or even longer, possibly, after contact before the sore comes to such a point as to draw your attention to it. But the common place for the occurrence of this sore is in the mucous membrane, the semi-mucous membrane of the reflection of the prepuce as it folds around the frænum, in the little sulci that are formed on either side of the frænum just at the commencement of the fossa glandis. This is the favorite seat, because here the wrinkles are numerous, the skin is very tender, the sebaceous follicles are numerous, the parts are constantly kept in a moist condition, and this is most favorable for the action of the virus. The consequence is, this is the very common locality for the sore, around the fossa glandis; or it may occur at any point of abrasion, at any wound; and this latter is the way in which we find the sores appearing within a very short time after contact. Perhaps within twenty-four or forty-eight hours there may be evidence of suppurative action where there has been a wound produced and the delay for the virus to work its way through the superficial covering has not been necessary.

This seems to have required three or four days from the time of contact until he noticed this trouble in the fossa glandis, the first one; and the others have come on since. But let us inquire into it thoroughly. When did you have the connection? "About six weeks ago." The connection to which you attributed this? "Yes, sir." And how long after connection did you notice something? "About four days." Was it this sore here? "No, sir, it was a running." Then it was not a sore that made its appearance three or four days after connection? "No, sir, it was a running."

Why, we have here a complication, and we are reminded of the fact that we may have several diseases acquired at the same time, at a single connection. He may get a gonorrhœa, he may get a chancreoid, he may get an initial lesion of syphilis, all at once. There is no law against it, either pathological or physiological. This sometimes occurs. A single instance of this kind I can recall, where a very amiable young gentleman came down here to visit his brothers, who were used to the ways of the city. He was troubled with seminal emissions, and his brothers thought it would help him to have connection. So they took him out one night, in order to cure him of his seminal emissions; very much against his sense of right. His moral sense was considerably disturbed about it, but he was over-persuaded, and went *just this once*, and after that he could not be persuaded. But three or four days afterward, he began to have a discharge, such as this young man seems to have had, and then three days after that he had some chancreoids, and about fifteen or twenty days following one of these chancreoids indurated and became an initial lesion of syphilis. Now, that is not uncommon. It is not uncommon for several diseases to be acquired at once. These diseases may coexist, from the fact that one, the gonorrhœa, is a disease of the mucous membrane;

it is not associated with ulceration; the other, chancroid, is an ulcerative process which comes from contact with a similar ulcer; and the other disease, syphilis, may be engrafted upon any sort of lesion. It is well, perhaps, to say in passing that it is not so likely to take place in active chancroid, and I question very much whether it ever does so except in a way to be mentioned immediately, from the fact that the cell which produces the trouble would be very likely to be destroyed by the active virus. But the way in which it does occur is that the syphilitic cell enters an abrasion, and it does not take a great while for it to get down out of reach of any chancroidal action. In this way, before the chancroidal action is fairly set up, the syphilitic cell has dipped into the lymphatic channels, and deliberately goes on to build up its characteristic accumulation until after the chancroid has healed and got out of the way, when a little nodule is left there which is significant of syphilis.

These things render it somewhat difficult in many cases to make out what disease we have before us, because they are associated with each other, superimposed upon each other in some cases, and consequently it becomes necessary for us to analyze these cases with very great care, and to seek out the landmarks which will enable us to decide positively as to which disease or how many of them are present in any given case.

Now, here, four days after connection, we find this young man complaining of a running. Did that smart you? "No sir, it only run just the least bit."

Well, now, you see we have constantly to change front in getting over a case like this. We find something which seems to promise one trouble, and looking a little more carefully into it, we find it is something else. I supposed from what he had said, viz., that the trouble followed three or four days afterward, and that it was a running from the penis, we were going to have a case of gonorrhœa from which he recovered; but this seems not to have been the case, for it seems now he had this running lasting a day or two only. If you have a gonorrhœa lasting only that length of time you are surprised at it; three or four weeks is more like the truth. But where it stops like this, it must belong to some other trouble. It may be a little leucorrhœa which starts up, irritating the mucous membrane, and passes off in three or four days; there are plenty of such cases. It may be a little deposit of chancroidal virus within the meatus, out of sight, and here the irritative action goes on, and the first you notice is a little weeping. The man thinks he is going to have a gonorrhœa. But his discharge does not go on and increase from day to day in that sort of way, but his penis is a little bit sore and a little red; perhaps he may notice a little bit of blood, if he has a pretty tight meatus, and if he looks carefully, opening the meatus, he will find a little lesion, a little chancroid.

That running passed off; did it leave a sore in there? "No sir; only a little pimple." Then it got well entirely. "Yes sir." He has a small orifice, and if he had this running and it got well within two or three days, it was probably from

the cause I have just suggested, a little leucorrhœal disturbance.

How long was it after the running stopped that you noticed this sore here? "About two weeks."

About two weeks then, after this, without any after connection, he had, as he says, this sore, and that has continued ever since. The history seems a little mixed, and it often embarrasses rather than helps the surgeon to make out the diagnosis. Now, we have here the history of a little discharge which came on three or four days after connection, which lasted only three or four days, and then within a couple of weeks a sore makes its appearance here. So, we may have this trouble due to syphilitic condition. That is possible. Although the length of time is unusual, yet, in some cases we do have an ulcerative lesion apparently dependent upon the syphilitic virus in cases where the suppurative disposition is very strong. An accumulation of cells in some instances results in their breaking down much sooner than in others. In the great majority of cases there is very slight or scarcely any tendency to the suppurative condition, while in others the infiltration of a comparatively small amount of cells will soon eventuate in their breaking down and becoming a little ulcerative point. When this is the case, the danger of mistaking it for a simple chancroid is very great.

The distinction that we make between a chancroid and a chancre is not an arbitrary, but a positive one. Whatever shape it may have, or whatever condition it may be found in, it must be followed by syphilis, to prove it to be a chancre. This is an absolute necessity. A chancre is not a chancre because it is a little nodule, nor because it has a slight abrasion, nor because it has gone on to ulceration, nor because it is single; but it is a chancre because it is followed by syphilis. These conditions that we associate with it, and which are common to it, lead us in the way of diagnosis; and when we find these conditions we have reason to suppose that we have the initial lesion of syphilis. But if the papule does not go on and enlarge, and implicate the glands at the groin in a peculiar way that the syphilitic trouble implicates them, if it is not followed by any syphilitic lesion, then we know that we have made a mistake; that something has occurred in this case to obscure the diagnosis, to deceive us, to give us the impression that there was a true chancre when none existed. We have to bear in mind that all the characteristics of the initial lesion of syphilis may be present without its being truly an initial lesion of syphilis. So that we have to wait oftentimes until something else has occurred, before we can give an expression of opinion in regard to it.

Now here we have, apparently, an ulcerative lesion which is somewhat indurated. This leads us to consider a point of importance in differential diagnosis. In chancroid we have simply ulceration without induration; the tissues are supple and perfectly soft. In the other case we have it characterized by a certain amount of induration, in degree, from that which simply thickens the integument to that which is described as cartilaginous hardness. This is a characteristic mark of the initial lesion of syphilis. And



yet a simple sore, a simple chancroid, may, by irritation, become indurated, so that you cannot tell the difference between that and the initial lesion of syphilis; and this must be borne in mind. In this case, as before mentioned, there is a certain amount of induration with it. Now, whether that is the result of some application which may have been made, or whether it is the result of infiltration of cell material, is a question which we cannot at once decide. Here we have a secretion which is not a mucous secretion, which is not a serous secretion, but it is evidently of a more or less purulent character. Again, we must remember that the simple serous secretion of a chancre may be turned into a purulent secretion by irritation, and that this irritation may be the result of applications made to it of caustics, which are used for the purpose of destroying chancroidal sores. It may be the result of friction from clothes, necessarily occurring in walking, or at the patient's business. Any irritation of the initial lesion of syphilis may produce, instead of the characteristic serous secretion, a purulent secretion, which purulent secretion has the same characteristics as the purulent secretion of the chancroid, namely, to set up an ulcerative action upon the mucous membrane, or upon the parts which come in contact with it; so that you may have the initial lesion of syphilis coming on characteristically, which shall never have been mixed up with any other sort of trouble at all; a pure, simple, initial lesion of syphilis, which may go on under these circumstances and produce a purulent secretion characteristic of chancroid. Now we may find that this condition here, which came on nearly three weeks after connection, is still the initial lesion of syphilis which has been irritated up to a purulent point, and, now, within the last few days, has given rise to chancroids without any further connection. There is nothing more positively known, in regard to the history of this disease, than that the initial lesion of syphilis, irritated, produces a purulent secretion which, inoculated, produces characteristic chancroid. Mr. Boeck, the great apostle of syphilization, he who syphilized a great many individuals and demonstrated this, found that in order to get the material for producing the characteristic lesion by inoculation, in the easiest manner, he had to take the ordinary initial lesion of syphilis and irritate it by the application of savin ointment until it became purulent. Then he took this and inoculated with it until it would inoculate no longer; then he would take a fresh subject, and so on, until each patient would no longer respond to inoculation. I simply speak of this in passing, to show you how well known is this fact, that pus received from an irritated syphilitic sore possesses the property in question.

So, then, although we have these ulcerative lesions, some of which are characteristic of chancroid, and which I present to you as specimens of classical chancroid, yet we are at a loss to know whether this young man has chancroid only, or not. This chancroid here is the leading feature of the case. That this one here is an accidental chancroid we know, but he has another sore there which is at least questionable.

Now, if this is truly an initial lesion of syphilis, we shall find that it has gone on in the usual way of initial lesion of syphilis; that the cell proliferation which is characteristic of this lesion has followed the track of the vessels running between this initial lesion and the groin on either side, and an accumulation of these cells has taken place. We examine on either side, and we find on this side no more than an ordinary amount of enlargement; still here is a pretty good-sized gland. There is a little more than the ordinary amount of enlargement here, on the left side, and on the right side there is quite a good-sized gland. Did you ever notice that? "Yes sir, I noticed it first recently." Has it been tender at all? "Yes sir, somewhat. It does not hurt me now."

When we brought this case before you it appeared to be a classical chancroid; it may be that we have something more important; we may have a case of syphilis; and that is why I brought the patient before you, to show you how necessary it is to follow up all the clues which present, that we may not be misled to say here is a case of chancroid which we will heal up, and let the patient go on about his business, when after a while you would learn that his trouble was not a chancroid, but syphilis. This mistake happens every day.

We have here painless glandular enlargements in the vicinity of this lesion. There is a peculiar glandular enlargement associated with chancroid which is characteristic; it differs from that of syphilis. The gland enlargement which is characteristic of chancroid is inflammatory in its commencement, inflammatory in its progress, resulting in abscess, I say, almost inevitably. Six months ago I would have said inevitably. I have taught, up to within six months, for many years, that when a gland is enlarged as a result of the chancroid secretion, suppuration is inevitable; a chancroid is at that moment established in the centre of that gland, which goes on inevitably to suppuration and the formation of an abscess, the secretion of which is chancroidal. But the experiments which were made last winter in Blackwell's Island Hospital, under my supervision—the administration of the calcium sulphide in all cases of bubo associated with chancroid—has led to the belief in the possibility of that suppurative action being arrested, because fifteen out of eighteen buboes so associated with presenting chancroids were brought to resolution. Now, we have not had enough experience on that point to state a positive conclusion, but we can say that the administration of a twelfth of a grain of the calcium sulphide every two hours during the day, to these patients, combined with other treatment, such as pressure and iodine, resulted in the resolution of fifteen out of eighteen. I speak of it in passing because I have so long and so often taught to the contrary, that they never can be arrested, that I wish to express here my doubt about it. I do not think we have experience enough yet in regard to the effect of this remedy, but I think there may be a doubt in regard to what I used to teach. At any rate, chancroid is inflammatory in its character, and its tendency is to go on to suppuration,



and it will do so unless it is combated by, as far as I know, only one means, that is, that which I have just suggested.

The bubo associated with the initial lesion of syphilis, on the contrary, never suppurates. Absolutely never suppurates, except—and all rules have exceptions—in cases of highly scrofulous nature, or where, becoming very large, they become subjected to irritation by friction, in the business, perhaps, of the individual, or from carelessness in walking, under circumstances which would almost naturally produce inflammation.

Now, here we find glands which are recognized by the patient as of recent enlargement, and are now painless. Recent painless enlargement of the lymphatic glands is evidence, very positive and strong evidence, of the presence of a syphilitic influence. Scrofulous glands enlarge slowly. Enlarged glands which come from ordinary causes, from irritation of the lymphatic vessels, from strain, and from wounds, are painful. They come on quickly, but they are painful. Here, however, they are painless, and the enlargement rapid, which is an important element in the diagnosis.

The next thing we would look for is an eruption. It has been six weeks since he had connection, so that it is too soon to look for the next characteristic of the disease which we seem to be following now, a syphilitic trouble, and that is, a roseolar eruption. Now, if in connection with this history—and here the element of time, you see, is of value—a sore, which came on nearly three weeks after connection, then followed by

a painless enlargement of glands—there should follow a roseola, we should not hesitate any longer to say that the man has syphilis. But now we must wait. The case is mixed, and we must wait for time to clear it up. I do not know of any other point which will be of service to us. The whole trouble is still local. Until we get an enlargement of glands at a distance, or a roseola, we have reason to suppose that the disease is confined to this particular locality, and that he has not, as used to be believed, a disease which pervades the entire economy at once. It is a satisfaction to know this; to be assured that the approaches which it makes to the general system are slow, and they give us an opportunity of meeting the disease and obstructing it in various ways by treatment.

Let us, however, examine him for enlarged glands at a distance. We look for these enlarged glands in the neck and in the epitrochlear regions, preferably. I find an enlarged gland here on the neck, at once. This is sometimes found before we can make out any roseola.

Now, these little chancreoids, when they come, are treated in the ordinary way, no matter how they have arisen; whether they have arisen from what is called the true chancreoid virus or not. We will have the opportunity of setting this chancreoid virus in its proper place some day. We know it can be produced, certainly, in two ways, and I think it can be produced in a variety of ways. But no matter how it is produced, we strike it with destructive agents which are capable of destroying this peculiar property of active ulceration.

## EDITORIAL DEPARTMENT.

### PERISCOPE.

#### The Collection of Data at Autopsies.

At the October meeting of the Massachusetts Medico-Legal Society, 1879, Dr. H. P. Bowditch read a paper on the above subject, which was published in the *Boston Medical and Surgical Journal*, August 12th, 1880. He says—

Imperfect as is our knowledge of the size of the organs in an adult, our information in regard to the viscera of growing children is still more fragmentary. With the exception of the heart, and perhaps, of the liver, there is scarcely an organ whose rate of growth has been approximately determined, and yet without this knowledge it is impossible fully to utilize the data obtained at the autopsies of children.

It is, moreover, possible that variations in the size of organs, even within what are usually considered normal limits, may so affect the relations of the different parts of the organism to each other as to produce tendencies and predispositions capable of exercising a profound influence upon the life of the individual. The well-known power possessed by the various organs of the body to adapt themselves to the demands made

upon them (for example, the hypertrophy of one kidney after the destruction of its fellow) will, of course, tend to restore the equilibrium of the organism, but it is by no means proved that the power of adaptation is in all cases so perfect as completely to neutralize the effect of marked anatomical variations.

Led by considerations similar to those above presented, and with a view to determining how far the various diatheses recognized by authors can be explained by anatomical peculiarities of the organism, Professor Beneke, of Warburg, has recently published the results of an investigation into the absolute and relative size of various important organs at different periods of life and in connection with different morbid tendencies. In researches of this kind conclusions are valuable, chiefly in proportion to the number of observations on which they are based, and the data at Professor Beneke's disposal were in many cases so scanty that, as he himself admits, further investigations are needed to confirm his conclusions. At the same time, many of the facts which he has brought to light are so interesting and so suggestive that it seems desirable to call the attention of this society to the matter, in the hope that a discussion of the subject may

lead to an organized effort on the part of the members to add to the data from which conclusions may be drawn in this most instructive field of study.

Some of the most important of Professor Beneke's results may be briefly stated as follows:—

1. Before the period of puberty the aorta is larger than the pulmonary artery; after this period the relation is reversed.

2. The aorta and pulmonary artery are smaller in the female than in the male, even at those ages at which the size of the body is greater in the female sex.

3. In adult males the volume of the lungs is greater than that of the liver. In adult females the reverse is the case.

4. In men the volume of the two kidneys is less than that of the heart; in women it is greater.

5. Children have a relatively larger intestinal canal than adults.

6. A sudden increase in the size of the heart occurs at the period of puberty.

7. The iliac arteries diminish in size during the first three months of life.

8. The cancerous diathesis is associated with a large and powerful heart, capacious arteries, but a relatively small pulmonary artery, small lungs, well developed bones and muscles, and tolerably abundant adipose tissue.

9. Pulmonary tuberculosis is often associated with an unusually small heart.

10. In rachitis the heart is large and well developed.

#### Removal of a Uterine Tumor During Labor.

Mr. A. M. Sydney-Turner, of Gloucester, reports the following interesting case in *The British Medical Journal*, July 31st, 1880:—

The patient was forty-six years old, and had had five children, all of whom were alive. She is a stout, healthy-looking woman, and seven years had elapsed since the birth of her last child. On examination I found (she being in labor at the time) that there was a tumor in the vagina, barely permitting the passage of the finger for examination of the os uteri. It was pear-shaped, with a broad pedicle, and was attached by the pedicle to the posterior half of the os. I was enabled to make out a vertex presentation; and as the labor pains were regular, but not strong, I decided to remove the tumor. With the assistance of Mr. Wilton (one of the consulting surgeons of our General Infirmary) I ligatured the pedicle with thin whipcord in two places, the upper ligature being as near to the base of the pedicle as was possible. This was done under chloroform. I then divided the pedicle with a pair of scissors, and removed the tumor. The labor came on strongly, and the woman was delivered of a female child. Before the placenta came away I examined the portion of the pedicle left behind, and found that the lower ligature had slipped; but the upper one—the one nearest the os—remained firm. A very gentle traction sufficed to bring the placenta away, and the case went on very well. I saw both mother and child very lately, and both are in good health. I forwarded the tumor

to Dr. Frederick Taylor, of Guy's Hospital, who very kindly examined it for me. The following is an extract from his letter. "A globular tumor, measuring nearly two inches in diameter. It cuts hard and dense, and presents within a great number of cysts, from the size of a pin's head to the diameter of one-third of an inch. The solid part of the tumor consists of muscular fibre-cells and white fibrous tissue; the latter in somewhat great quantity. It may, therefore, be described as a fibro-myoma undergoing cystic change, or more shortly as a fibro-cystic polyposus."

#### The Mischievous Effect which may Arise from the Listerian Precautions in Abdominal Section.

Lawson Tait, F.R.C.S., relates the following case in the *Medical Times and Gazette*, July 31, 1880:—

H. H., aged twenty-four, sent to me by Dr. Allen, of Dudley, was admitted to the hospital, on June 21st, with a large tumor occupying the right half of the abdomen and pelvis. It moved very freely, was the seat of great pain, and had been increasing rapidly. The diagnosis was that of a tumor of the right kidney, and at a consultation it was agreed to explore, in the hope that it might be capable of removal.

On June 25th, an exploratory incision was made, the relations of the tumor ascertained to be such that it could not be removed, and the wound closed. The operation was a simple exploratory incision, of which I have performed a large number without the Listerian precautions, not only without ever losing one, but without ever having cause to be at all anxious about the recovery.

The only Listerian precaution used in this case was the carbolic spray. The strength of this spray I had been gradually reducing till now it is used of not more than 1.6 per cent. In this case very alarming symptoms set in within four hours of the operation, and within eighteen hours of the operation the abdomen was distended, the temperature rose to 105.1°, and the pulse to 160, so that I made up my mind she was going to die. It was not till the third day that distinct signs of improvement set in, and my patient appeared to be recovering.

The train of incidents were so precisely similar to those seen in a fatal case of ovariectomy, where death seemed due solely to thymol, that I at once instituted inquiries as to the possibility of some overdose of carbolic acid, and then it was discovered by the sister in charge, that a mistake had been made in the bottle from which the spray mixture was taken, and that a very strong spray had been used—what strength is not accurately known, but probably five per cent.

That the alarming symptoms were due to acute peritonitis, due to the spray, is certain from the suddenness of their onset; and the only parallel in the whole of my experience is in the thymol case alluded to. When an abdominal operation is doing badly, the distention, temperature, and pulse-rise are not apparent, as a rule, till about fifty hours after the operation; never, in my experience, have they occurred under thirty hours, save in these two instances.

I have now abandoned all the Listerian precautions but the spray, and I need not say that this incident has not made my respect for it any greater. I cannot speak authoritatively about the Listerian method in any department of surgery but my own, but in abdominal surgery it is an undoubted source of danger.

#### Dislocation at the Wrist.

The fact that dislocations at the wrist are extremely rare, has led Dr. E. J. Kempf, of Ferdinand, Ind., to report the following case from the note-book of the late Prof. Kempf, in the *Medical Herald*, for July, 1880:—

In March, 1851, I was walking along Shelby Street, in Louisville, toward my office, when I noticed a crowd of excited people at the corner of Green and Shelby. On investigation I found that a young man had fallen from a butcher-wagon and was severely hurt. On examining the young man I found that either both his wrists had been dislocated, or both presented a fracture. Being fresh from the lectures of Prof. Gross, the following flashed through my mind: "Gentlemen, be sure that you are right, then bulge on, regardless where you are and regardless of the ignorance of professional brethren, or of the laity's opposing you." Knowing that if the case was one of dislocation, prompt action was necessary, and as time would not allow me to send for counsel, I based my diagnosis on the following facts: The boy had fallen from the wagon directly on to both hands; the upper end of the carpus formed a prominence on the dorsum of the wrist, and the lower end of the radius and ulna projected on the palmar surface. The forearm had, so to speak, a swollen prominence on the dorsal side and a hard prominence on the palmar. I could detect no crepitus, and the wrist joint was immovable. I directed a strong man to pull at the forearm toward the shoulder joint while I made traction on the hand with all the force of my right hand, manipulating the wrist joint with my left hand. I then reduced both dislocations, the reduction of the dislocation confirming my diagnosis. The young man was directed not to use his hands in the least, to carry them in a sling, and to bathe them with chamomile tea two or three times daily. Five days after the accident the young man could use his hands, only a slight stiffness and soreness remaining.

#### Detection of Strychnia in Exhumed Bodies.

How long after death strychnia may be detected in the body, is a question which Prof. Ranke has set himself to discover by a series of experiments on dogs of various sizes and species, to which he administered one decigram of nitrate of strychnia. The London *Medical Record* summarizes his conclusions respecting the possibility of detecting strychnia in dead bodies. They are as follows: 1st. It was not possible to prove the existence of the poison by a chemical test in a dog which had been poisoned by the dose mentioned above (and which would prove fatal to a human being) after it had been buried 100, 130, 200, and 230 days. 2d. The presence of the poi-

son could, however, be suspected from the peculiarly bitter taste of extracts of dogs which had been buried in the earth for 330 days. 3d. The physiological test for strychnia is much more delicate than the chemical test. Frogs, under the skin of whose backs a cold water solution of the extract had been injected, exhibited violent tetanic symptoms a short time afterward. The effects of the poison were especially strong if the extracts were taken from animals that had been buried only 100 days, but even after remaining in the earth for 330 days the extracts would produce the symptoms of strychnia poisoning in frogs. 4th. The physiological reaction is the same whether the bodies have remained in a moist or in a dry soil. 5th. Extracts which have been prepared from bodies that are far advanced in putrefaction produce a peculiar effect on frogs. They seem to become prostrate and stupefied, and the action of the heart is rendered much more feeble and slow. This is often apt to partially cover and retard the action of the strychnia. This effect is most striking when the extract is prepared from the bowels, less so when it is made from the stomach, and least when the extracts are prepared from the liver and spleen. 6th. The physiological action of strychnia is most distinctly seen when the extracts are prepared from the liver and spleen. This is not a new discovery, in so far that it has been long known that in cases of strychnia poisoning traces of the poison could be discovered in these organs *par excellence*.

## REVIEWS AND BOOK NOTICES.

### NOTES ON CURRENT MEDICAL LITERATURE.

—Among the articles contained in the *Atlantic Monthly*, for September, are a continuation of the "Stillwater Tragedy," by Thomas Bailey Aldrich; "Two Score and Ten" (Poem), by J. T. Trowbridge; "Sir Walter Scott," by Thomas Sergeant Perry; "Political Responsibility of the Individual," by R. R. Bowker; "The Perpetuity of Song" (Poem), by James T. Fields; "Aux Seriesux," by Ellen W. Olney; "Unaware" (Poem), by Maurice Thompson; "Women in Organization," by Kate Gannett Wells; "Mrs. McWilliams and the Lightning," by Mark Twain; and several others.

—*The United Service* for September contains the following articles: "Gustavus Adolphus," by J. Watts de Peyster, Brevet Major-General, S.N.Y.; "The Progress of Torpedo Warfare," by Lieutenant-Commander F. M. Barber, U.S.N.; "Benedict Arnold at Saratoga," by Isaac N. Arnold; "Historical Types of Ships;" "Bits of Army Etymology," by Brevet Lieutenant Colonel W. W. Closson, U.S.A.; "Man-of-war's Life Two Hundred Years Ago," by Medical Director E. Shippen, U.S.N.; "The Navy and How to Im-

prove it," by a Naval Officer; "Military Consolidation of the Indians," by Capt. H. C. Cushing, Fourth U.S. Artillery; "Cook's Naval Ordnance and Gunnery," by Prof. John M. Brooke, Virginia Military Institute; Editorial Notes, and Service Literature.

—*Lippincott's Magazine* for September opens with an agreeable and well-illustrated paper on the lake region of Florida, "Ekoniah Scrub," which, lying out of the line of ordinary travel, is but little known, though its natural features and scattered settlements are curious and interesting. The concluding paper of A. H. Siegfried's "Canoeing on the High Mississippi" describes the return voyage. "A Villeggiatura in Asisi," by the author of "Signor Monaldini's Niece," is a charmingly written account of a summer passed in a quaint Italian town, the resort of pilgrims from every quarter, and the scene of some of the most striking ceremonies and religious practices which have descended from mediæval times. "Newport a Hundred Years Ago," by Frances Pierrepont North, is an article which calls up vividly the period when this chief among American watering-places was occupied by a French army and fleet sent to aid the cause of American Independence, and was even more gay and brilliant than it is at the present day. "Horse-Racing in France," the first of two papers by L. Lejeune, is full of details that show a familiarity with the subject in all its relations. The fifth chapter of "Studies in the Slums," by Helen Campbell, treats of "Diet and its Doings." "Short Studies in the Picturesque," by William Sloane Kennedy, exhibits a close observation of the choice but characteristic features of American scenery. The continuation of "Adam and Eve," several short stories and poems, the "Monthly Gossip," which is unusually full, and the "Literature of the Day," complete the number.

#### OUR EXCHANGES.

*Harper's Monthly* for August, just received, is an exceedingly attractive number. It is difficult to designate any especially attractive article, all are so good, and the illustrations *exquisite*. The new serial, "Washington Square," by Henry James, Jr., has begun well, and promises to be of no common interest. Longfellow's poem, "Robert Burns," with its charming medallion likeness of Scotland's favorite young poet, is the attraction of this number.

The mid-summer number of *Scribner's Monthly* is one of especially varied interest, containing more than its usual number of articles of

solid reading, the continuation of "Grandisimes," and "Peter the Great," all beautifully illustrated. It certainly is a rare specimen of an excellent family magazine.

*St. Nicholas*, the children's favorite, is full of bright and beautiful things attractive to others than the young folks.

Of our weekly exchanges, *Littell's Living Age* comes first and best. It cannot be excelled, and only needs to be known to be appreciated, and where the monthlies are not taken can supply their place abundantly.

*Harper's Weekly* is the best of all illustrated weeklies, and *Harper's Young People*, is constantly increasing in interest.

*The Agriculturist* is the cheapest and best of its kind, almost a necessity to every one engaged, even moderately, in agricultural pursuits.

The best of family newspapers are the *German-town Telegraph*, *Vermont Journal*, *Cincinnati Gazette*, and *Trenton Gazette*.

Of religious weeklies, the *New York Evangelist*; *The Independent*; the *Pittsburgh Banner*; *Presbyterian*; *Christian Advocate* and *Zion's Herald* come regularly, and are always welcome.

#### BOOK NOTICES.

**A Pharmacopœia, including the Outlines of Materia Medica and Therapeutics, for the Use of Practitioners and Students of Veterinary Medicine.** By Richard V. Tuson, Fellow of the Institute of Chemistry; Professor of Chemistry, Materia Medica, and Toxicology at the Royal Veterinary College; formerly Lecturer on Chemistry at the Charing Cross Hospital. Third Edition. Philadelphia, Presley Blakiston, 1012 Walnut Street, 1880. Cloth, 8vo, pp. 358. Price \$2.00.

In this work are found, arranged in alphabetical order, all the remedial agents used in veterinary medicine. They are treated of under the following heads: Latin pharmaceutical name; English pharmaceutical name; synonyms; natural order; composition; mode of preparation; characters and tests; actions and uses; doses; modes of application; incompatibles; antidotes; preparations. The doses are given for horses, for cattle, sheep and dogs.

The work appears to be very complete, is gotten up in first-class style, and has an index appended. It cannot fail to prove of the greatest value to practitioners of veterinary medicine.



THE

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**EFFORTS TO OBTAIN MEDICAL STATISTICS.**

The worth of Statistical Medicine seems but little appreciated in this country, if we may judge from the indifference with which it is treated by the government of most of the States. It is, indeed, a modern science, and may be said to be in its infancy. The same is true of most statistical studies. This year, for the first time in our history, we are promised a census which will be something more than a mere enumeration of individuals. To be sure, the last census, made under the same efficient auspices as the present one, attempted to include economical statistics; but the results, though useful, were far from accurate or full.

As they were, they were highly valued by thoughtful men. In this year also we are promised a much better series of statistics from the National Board of Health. It has done its best, up to the present, but confessedly, that best was not good. The prime causes are the indifference of the medical profession in aiding the reporters and the confusion which

exists in the forms used. Now it is stated in one of the Board's *Bulletins* that not only is there no uniform plan as to nomenclature, classification, or arrangement, but a most ingenious diversity exists as to the selection or omission of the several items of information usually expected in such reports. As most of them do not enter upon *vital* statistics, they can be compared only as reports of *mortality*, and even with this restriction it is found that of the various fundamental facts required in these reports, the total number of deaths for the year is the *single one* that can be carried without interruption through the series. The population, which is the essential basis of all estimates, is given in all the reports, but in some of them it is taken from a census too old to be of any present value in this country, where the movement of population has not only its general onward course, but its eddies and currents, due to local or temporary causes, which produce sudden and irregular changes.

The primary facts with which Statistical Medicine concerns itself, are births, deaths, marriages and epidemics. Its application to pathology, as advocated by Louis, does not properly come within its domain. On the other hand, its utility would be vastly increased could it be extended to all diseased conditions, and a general registration of disease, on some uniform, well matured plan, be effected. This has been long advocated, but not yet matured, in foreign countries.

A certain amount of discredit has attached to statistics from the facility with which they can be "manipulated." The popular impression is that they can be twisted to support any theory.

The real difficulty is that their reduction and appreciation can only be carried out by difficult mathematical methods, and by a recognition of all the factors, whereas superficial writers and critics, unacquainted with these methods, often apply others, far from correct. For example, the doctrine of averages and the calculation of probabilities are well defined mathematical branches, but by no means easy to the tyro in arithmetic. It is a strange and often startling doctrine, even to many intelligent people, that

what is true of the whole is never true of the part; that is, that the law of the average is never the law of the individual.

They say, if these results are no guides for you and me, or anybody else, of what good are they? They forget, that the rules for dealing with masses are and must be radically different from those for dealing with individuals.

The foundation of any general system of State or National Sanitation must be Statistical Medicine. Whoever wishes to aid in the work which the Census Bureau and the National State Boards of Health are interested in, should in the first instance endeavor to assist them in their collection of statistics. Last year the Superintendent of the Census made a special appeal to physicians all over the country to keep and send him certain records, blanks for which he furnished. It is earnestly to be hoped that he will not be disappointed in the amount of information he will receive from this source. So far as we know, it is the first attempt made to get these facts from all parts of our nation; that it is not obligatory, as it is in some countries, should make the profession all the more prompt to respond.

## NOTES AND COMMENTS.

### Therapeutical Notes.

#### SALICYLATE OF SODA IN PETECHIAL TYPHUS.

According to Dr. Gregorianz, in *La Presse Médicale Belge*, the effect of this salt is very favorable; it lessens the tendency to delirium, lowers the temperature, and prevents renal complications. The progress of the disease also is influenced—it develops more rapidly, and convalescence is hastened. An inconvenience is its depressing effect on the heart, but this may be obviated by giving it in small doses (5 grams), and adding a stimulant, such as sherry or brandy, to the mixture.

#### PILOCARPINE IN URÆMIC CONVULSIONS.

Leven, in *La Presse Médicale Belge*, advocates the use of subcutaneous injections of pilocarpine in uræmic convulsions. A young girl, affected with albuminuria, was seized with convulsions with complete anuria. Two injections of hydrochlorate of pilocarpine had no effect, but at the third the remedy produced its ordinary effect.

The patient, who was comatose, gradually came to herself; at the same time profuse perspiration and abundant salivation were produced. After a fourth injection the convulsions ceased and the patient recovered. The temperature oscillated between 37° and 38° C. (98½°–100½° Fah.). The saliva contained ten per cent. of albumen.

#### EUCALYPTUS SPRAY IN PHARYNGEAL DIPHTHERIA.

Dr. Mester, according to *Berlin Klin. Wochen.*, employs from six to sixty drops of the following solution for each spray inhalation:—Essential oil of eucalyptus leaves, 5 grams; rectified spirits of wine, 25 grams; water, 170 grams. Previous to inhalation the mixture should be shaken. Where the inhalation has to be repeated hourly, the solution must be diluted. The odor being agreeable, does not cause headache, in this respect being superior to turpentine or carbolic acid.

### Generalized Vaccinal Eruptions.

Dr. Hervieux, of the Paris Maternité, terminates a paper contributed to the *Archives de Toxicologie*, for June, with the following conclusions:—

1st. There exist two varieties of supernumerary vaccinal eruptions. One of these results from accidental inoculation produced by the nails of the subject or by inadvertent punctures. The other is spontaneous, and pursues the same course as an eruptive fever. 2d. Spontaneous, vaccinal eruptions are observed under a form identically similar to those of vaccinia, and are developed at the same time as the pustules which appear at the place of inoculation, or they take on the form of erythematous, papular, miliary, or vesicular exanthemata, appearing from the eighth to the eleventh day. 3d. Generalized vaccinal eruptions have often been mistaken for variolous affections. But while there can be no doubt, in spite of a widespread popular prejudice, that vaccinia does not engender variola, that is no reason that these should not complicate each other. The possibility may even be conceived, during the prevalence of an epidemic, not only of a parallel evolution of the two exanthems, but of the transmission of variola, if not by vaccinia, at least by the vaccinator, in the case of his having employed the vehicle of contagium after having been in direct relation with the subjects of variola. It is within these proportions, to be conformable to truth, that the belief ought to be confined which we are constantly coming in contact with in practice—that vaccine may become an agent of the propagation of variola.

**The Action of Quinine, Digitaline and Atropine.**

The following conclusions arrived at on this subject by Dr. Guido Cavazzani are published in the *Annali di Med. Pub.*, etc. :—

Quinine and atropine have an astringent action on the peripheral vascular extremities. They correct the vascular dilatation caused by digitalis. Atropine and digitaline are antagonistic, the first giving tone to the terminal vessels and paralyzing the heart, the second producing an opposite effect. These two remedies associated cause considerable slowing of the ventricular contractions of the heart, and much less slowing of the auricular contractions. Quinine and digitaline combined reciprocally increase their force of action. Quinine and atropine neutralize each other as to their action on the heart. These three remedies given singly may cause a state of collapse, which in quinine is due to ischæmia of the heart, in digitalis to its tetanization, and in atropine to its asthenia.

**A New Mode of Treating Phymosis.**

Hue, in *Bull. de la Société de Chirurgie de Paris*, tome iv. No. 8, suggests a plan which does away with the necessity for chloroform, and is less painful than the ordinary modes of procedure. He threads a needle with a thread of India-rubber (which may be easily got from an elastic brace), covers the point of the needle with a small piece of soft wax, and so insinuates it between the glans and prepuce as far as he desires to divide the latter. He then pushes the needle through the prepuce, and so pulls the thread through. He now stretches the India rubber at both ends, and secures it in this stretched condition by tying a thread of silk round. In ten days the elastic ligature has cut its way out, and in from ten to twenty more the wound has become healed. In about seventy cases he was satisfied with the final result. Huerteloup, commenting on this, regards the procedure as better suited for children with a short prepuce than in cases of phymosis of inflammatory origin, or where the foreskin is long.

**The Efficacy of Whipping in Hysteria.**

M. Ad. Henrot relates, in the *Union Médicale et Scientifique du Nord-est*, of 31st December, 1879, the case of a young female of twelve years, who was attacked suddenly, without known cause, by convulsive fits, with suffocation, cough, barking, and cesophageal spasm. The fits were very frequent, and had shown themselves twelve days before M. A. Henrot saw the patient.

Physiognomy was excellent, and there was nothing in the general state to indicate a serious disturbance of the nervous system. All the antispasmodic remedies had been tried without result, so that M. Henrot thought she deserved a more energetic treatment, which he had seen successful in similar circumstances. At the first fit occurring in his presence, M. Henrot beat the patient unmercifully with a napkin previously dipped in cold water. The fit ceased rapidly, and since then the nervous manifestations have entirely disappeared.

**Acute Poisoning by Iodide of Potassium.**

M. Anger reports, in the *Praticien*, a case under his care in the Tenon hospital, in which the administration of two grams (thirty grains) of iodide of potassium brought on a condition characterized by fever, considerable tumefaction of the eyelids, lips, and gums, and profuse sweats. All these symptoms disappeared when the iodide was withheld.

This reminds us of a case which occurred in our own practice about three years ago, in which the patient's eyes were completely closed, and the entire face much swollen a few hours after a single dose of five grains of iodide of potassium had been taken. The swelling, together with other unpleasant symptoms, soon subsided.

**Tuberculosis of the Heart.**

Herr Sanger publishes in the *Archiv des Heilkunde*, Band xix, a paper, in which he reports twenty-two cases of this disease. According to his experience, cardiac tuberculosis shows itself under several forms: extra-pericardial tuberculosis, which successively reaches the pericardium and the myocardium by propagation; peri-myocardial tuberculosis; and endocardial tuberculosis. In these different forms, tuberculosis shows itself under the various aspects of circumscribed tuberculosis, diffused tuberculosis, and myocarditis with tuberculosis.

**The Action of Collodion on Temperature.**

We learn from the *Bull. Générale de Therap.*, June 15th, 1880, that Dr. Raducan has made some interesting observations on the effect produced on the general temperature by the external application of collodion; these he publishes in his inaugural thesis (*Thèse de Paris*, 1879). In health the effect on the central temperature varies with the site of the application. If the collodion be spread on either of the lower limbs the temperature is unaffected. But if the collo-

dion be applied in such a way as to cover all the cutaneous surface corresponding either to the peritoneum or the pleura, an immediate and notable lowering of the central temperature is observed. Dr. Raducan thinks that the difference noted explains the therapeutic action of collodion in inflammation.

#### Scrotal Tumors.

These tumors, which are very common in lower Bengal, although they do not often occur in other parts of India, consist in a true hypertrophy of all the scrotal tissues. They are most frequently met with in otherwise healthy individuals with an abundance of adipose tissue, and, unless removed, will grow to an enormous size. One of the largest tumors of this class was removed from a Calcutta merchant, on the 10th of November, 1879, by Dr. S. B. Partridge, late Professor of Surgery in the Calcutta Medical College, the case being reported in the *Medical Times and Gazette*, June 19th, 1880. The patient was carefully weighed before being operated on, his weight being 276 pounds; the tumor after removal proved to be 111½ pounds; so that, without making allowance for the contents of the hydrocele, etc., the mass removed fell but little short of half his original weight. When he was standing in the erect posture the tumor reached to within six inches of the ground, and he made use of it as a writing desk.

Some slight excoriations on the surface he attributed to rats having gnawed the growth on one occasion while he was asleep—an explanation supported by the fact that the sensibility of the hypertrophied integument was considerably diminished.

In the removal of these tumors, care must be taken to remove all the integument, even of the penis, as they will otherwise return. A new scrotum is always formed in from two to three months.

#### The Treatment of Boils of the External Meatus of the Ear.

Dr. Weber-Liel recommends, in *Deutsche Medicinische Wochenschrift*, 10th April, 1880, in boils of the external meatus, subcutaneous injections of a five per cent. solution of carbolic acid. Two to four drops of this are to be injected by one or more punctures, the point of the injecting syringe being inserted into the swollen part to a depth of one or two millimetres. When these injections are performed in the early stages, before formation of pus has taken place, the further development of the local inflammation is, ac-

cording to the author, prevented. In quite the early stage a single injection often suffices, followed by ear-baths of rectified spirit containing a minute quantity of corrosive sublimate. When the boil is more advanced, several injections, either at one sitting or at different times, may be required to produce local anæsthesia of the parts. The author cautions against the use of an impure solution of carbolic acid, or of a larger quantity than from two to four drops at the commencement. If this fails to produce complete anæsthesia, the injection may be repeated the same evening, with the addition of three drops of the fluid.

#### Incoercible Vomiting in Pregnancy.

Dr. Welponer states, in the *Wien Med. Woch.*, May 22d, 1880, that in consequence of a recommendation of Prof. Braun-Fernwald, who has several times found it useful in private practice, he has met with excellent success, in three cases of obstinate vomiting in pregnancy which had resisted all other means, from the application of a ten per cent. solution of nitrate of silver to the vaginal portion of the cervix uteri. He keeps the solution in contact for five minutes, and then dries the parts with cotton-wool. The application requires to be repeated several times at intervals of two or three days; but its ultimate success is remarkable.

#### The Treatment of Ozena.

In a patient affected with a muco-purulent fetid nasal discharge for a year, Dr. Wolfrum, according to *Berl. Klin. Wochen.*, employed, twice a day, aspirations for five minutes at a time, of a solution of tannin and glycerine, two per cent., preceded by irrigation of the nasal fossæ with a litre of a solution of sea salt. After a fortnight he had recourse to a solution of acetate of alumina, at first of one-half per cent., and then one per cent. The nasal secretion diminished in abundance and fetidity; then the number of douches and nasal inhalations was reduced. After six weeks the patient was cured of his ozena, which had not reappeared in two years.

#### Anti-Vaccinationists.

The *Pacific Medical and Surgical Journal* refers those who regard vaccination as "a relic of barbarism" to the medical statistics of India, where, in three of the local governments, the total deaths from smallpox in the year 1878 were 226,946, and advises the anti-vaccinationists to



travel off to the Panjab, where they may enjoy the fruits of exemption from the Jennerian curse. Civilization and humanity can well dispense with their reformatory services.

## CORRESPONDENCE.

### Proposed Memorial to Prof. Bernard.

EE. MED. AND SURG. REPORTER.

Having been selected by the Paris Committee (Messrs. Ranvier and Dumontpallier) having charge of the subscription for a monument or memorial to the late Prof. Claude Bernard, to represent them in the United States, I beg leave to be allowed to use your columns for the purpose of appealing to the members of the medical profession and all others interested, to subscribe to this worthy project.

I need hardly remind your readers of the great debt which every practicing physician owes to the labors of the illustrious physiologist whose memory we are, asked to honor in this way.

All inquiries and subscriptions, in the shape of bank checks or postal money orders, should be addressed to me.

Trusting that I shall have the advantage of your active personal support in this matter, I remain, yours, etc. E. C. SEGUIN, M.D.

New York, 41 West 20th St., July 31st, 1880.

### Making Batteries.

ED. MED. AND SURG. REPORTER.

Without the least idea of disparaging the very interesting article by Dr. Blackwood, in No. 5, Vol. xliii, of the REPORTER, let me give you my plan for making a galvanic battery. Quinine bottles are pretty good for cups, but they are not so easily worked as are tumblers. I will make one cup or jar with a tall glass tumbler; you can make as many more as you wish.

Get a piece of sheet copper, four inches long and one inch wide. With a pair of shears cut nearly off an eighth of an inch from the edge of the copper plate. Bend this thin strip at right angles from the point it attaches to the plate. Now coil the plate around your knife handle, just as you would wind a bandage around your finger. This coil, like a watch spring, will lie in the bottom of the tumbler, on its edge, the narrow strip you have almost severed standing up and above the rim of the tumbler.

Now, if you cannot get or do not want the help of a brass foundry to make you a zinc disk, three-fourths of an inch thick and an inch and a half in diameter, proceed in this way: Get some moulding sand, or clay, or plaster-of-Paris, and, with the bottom of a two-ounce bottle make a print in the sand, three-fourths of an inch deep. Melt up old zinc and pour into the print. To the centre or edge of the zinc disk solder on three inches of insulated copper wire. Bend the lower portion of the wire so the zinc disk can be hung on a stick across the top of the tumbler or on its edge. See that there is a space of an inch or more between the copper coil in

the bottom and the under side of the suspended zinc disk. Put a tablespoonful of sulphate of copper on and around the copper coil, and fill the tumbler to the top of the zinc with water. Connect the wire from the zinc to the copper strip of the second jar by means of a paper fastener, or tie with a string. Make as many of these jars as you want, and your battery is complete.

In a few days the cups will contain two solutions, sulphate of copper at the bottom and sulphate of zinc at the top. Add sufficient sulphate of copper, from time to time, to keep the blue line above the copper coil, or midway between the copper and zinc. The zinc disks will need washing occasionally. The copper coils will remain good for months.

A pliable conducting cord can be permanently fastened to the copper of the first cup, and any number of cups can be used simply by putting the metallic end of the other pliable cord into the solution of the last cup of the required number.

Canyonville, Oregon. C. H. MERRICK, M.D.

### A Complicated Diagnosis.

ED. MED. AND SURG. REPORTER.

Below is a synopsis of the diagnosis of disease made in a case by a so-called doctor of "root and yarb" proclivities in this county. The following diseases were found to exist at once, in the system of the unfortunate patient, who, it is needless to state, succumbed to the inevitable. She was afflicted (according to the "doctor's" statement) as follows: with purpura hemorrhagica, periuterine cellulitis, metritis, endometritis, peritonitis and pneumonia combined with jaundice. "After life's fitful fever she sleeps well." Now, many of the practitioners in this locality, fearing this is contagious, would like to know if any specific remedy has been discovered for treatment of this disease. Also, if you cannot suggest some less formidable title by which we may "handle the critter," when we are forced to announce the terrible malady to our patients.

Winterset, Iowa.

ANON.

## NEWS AND MISCELLANY.

### Warning to Travelers on the Continent of Europe.

A correspondent to the *British Medical Journal* describes a severe outbreak of typhoid fever in Switzerland, to be traced, it is stated, as most of such outbreaks are traced, to impure drinking water. Sir Henry Thompson, adverting to this abundant source of danger to travelers, recently recommended that every traveler should carry with him a filter and a teapot, by way of practically abolishing by personal care some of the danger of impure water by securing that it should be very thoroughly boiled before being used. Dr. Hermann Weber, whose experience of foreign resorts is perhaps greater than that of any other English authority, has published a similar warning to travelers, and has recommended them to use Apollinaris water whenever it is to be obtained, as an undeniably pure drinking water, which would secure them from these dangers; and he has stated that he

has known, in more than one instance, when members of the same traveling party have been careful to adopt this precaution, while others have neglected it, that those who adopted such precautions have been saved from typhoid fever, which attacked other members of the party. In the meanwhile, some such precaution for obtaining drinking water of absolute and guaranteed purity must recommend itself as a necessary means of safety. Recent analysis by chemical authorities, of which some of the results are before us, have shown that the water contained in the syphons which are introduced at foreign restaurants is not more reliable than the ordinary water supply; indeed, a table before us indicates that, in one great foreign city at least, the water in the syphons is very much more impure than even the ordinary city drinking water, being in some cases little better than diluted sewage water. It appears that the manufacturers of these aerated waters in foreign syphons are by no means very careful from what kind of surface-wells they draw their supply, or how they purify their water; and, on the whole, the danger of drinking the aerated water of syphons is, unless the quality be definitely ascertained, greater even than that of drinking the ordinary impure water. It is quite time that foreign authorities should turn more serious attention to this subject.

#### Monument to Professor Broca.

A committee has been appointed by the Paris Société d'Anthropologie to collect subscriptions for the purpose of raising a monument to the memory of Broca. It consists of MM. Henri Martin, Verneuil, de Quatrefages, Menier, Leguay, Topinard, Parrot, Gavarret, Pozzi, Ploix, and Magiot. Subscriptions are received by M. Masson-Leguay, 3 Rue de la Sainte-Chapelle.

#### Items.

—A certificate giving the cause of death as "collary fantem," was sent in to the Board of Health recently. Investigation proved the author of the certificate to have been a graduate of Buchanan's college.

—The following are the officers elect of the American Dental Association, for the ensuing year: President, Dr. C. N. Pierce, of Philadelphia; First Vice President, W. C. Barrett, of Buffalo; Second Vice President, G. J. Freidrichs, of New Orleans; Recording Secretary, George H. Cushing, of Chicago; Corresponding Secretary, A. M. Dudley, of Salem; Treasurer, W. H. Goddard, of Louisville.

#### OBITUARY NOTICE.

Dr. L. V. Newton, editor of *The Druggist's Circular and Chemical Gazette*, died on July 10th, at the age of seventy-one. He was born at Griggstown, New Jersey, and spent his early life in journalistic pursuits, not graduating in medicine until he was twenty-six. Dr. Newton led for a time a somewhat roving life, practicing medicine in Philadelphia, London, Virginia, in New Orleans during the yellow fever plague in

1848, and finally coming to New York. In 1858 he became editor of *The Druggists' Circular*, then having but a small circulation. By his literary and scientific accomplishments and his business capacity, he made his paper one of the best pharmaceutical journals in the country.

#### OBITUARY RESOLUTIONS.

WILSON.—At a special meeting of the Medical Club, in reference to the decease of our late member and associate, Dr. Joseph F. Wilson, the following resolutions were unanimously adopted:

*Resolved*, That in the death of Dr. Joseph F. Wilson the Club has lost one of its oldest members and most genial companions, producing universal sadness throughout the entire profession in which he was known and loved. The Society in which he was accustomed to move and act deeply mourns his sudden taking off, and the community at large has lost a valued citizen and devoted co-laborer in the field of advancement, and a persistent worker in the path of human duties.

*Resolved*, That the condolence of the Club be extended to the bereaved widow and family of the deceased.

*Resolved*, That we attend the funeral in a body, and a copy of these resolutions be published in our local papers and the MEDICAL AND SURGICAL REPORTER, of Philadelphia.

WM. C. TODD, M.D.,

JOS. H. KELLY, M.D.,

H. N. UHLER, M.D., Committee.

McMICHAEL.—At a special meeting of the Butler County Medical Society, June 14th, 1880, the following resolutions were adopted:—

WHEREAS, It has pleased Almighty God, in His infinite wisdom, to remove from our midst Dr. Josiah McMichael, one of the first organizers of the Butler County Medical Society, whose professional worth and whose generous heart we all so highly esteemed, therefore, be it

*Resolved*, That we deeply lament the loss of our late friend and associate, Dr. McMichael, whose constantly courteous deportment toward his professional brethren and genial companionship have endeared him to our hearts, and whose intelligence and experience in the observation of diseases has commanded our respect and esteem.

*Resolved*, That in his death this Society has lost a most steadfast supporter, a constant attendant at all seasons, a most thoroughly useful working member, his community one of its best and most appreciated citizens, and his patients a most generous, skillful and prompt counsellor.

*Resolved*, That these resolutions be placed on our records; that the Secretary furnish a copy, duly signed, to the family of the deceased, with the assurance of our deep sympathy in their bereavement; a copy for publication in the *Transactions* of the Medical Society of Pennsylvania, and a copy to one or more of the county papers.

A. M. NEYMAN, M.D.,

R. H. PILLOW, M.D.,

S. D. BELL, M.D.,

Committee.